

## Research Article

## Determining Factors for Discontinuing Hormonal Contraceptive Use in Acceptors at the Kassi-Kassi Community Health Center

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### Abstract

**Objective:** To analyze the incidence of hormonal contraceptive discontinuation in the working area of the Kassi-Kassi Community Health Center, Makassar City.

**Methods:** This study employed an observational analytical design with a case-control approach using retrospective data. The study sample consisted of 80 respondents, comprising 40 cases and 40 controls, selected using a total sampling technique. Data were collected using a structured questionnaire. Statistical analysis was performed using the chi-square test.

**Results:** The findings showed no statistically significant association between husband's support and hormonal contraceptive discontinuation ( $p = 0.781$ ;  $\alpha = 0.05$ ). Parity was also not significantly associated with hormonal contraceptive discontinuation ( $p = 1.000$ ;  $\alpha = 0.05$ ). Likewise, no significant association was found between side effects and hormonal contraceptive discontinuation ( $p = 0.108$ ;  $\alpha = 0.05$ ).

**Conclusion:** There was no significant relationship between husband's support, parity, and side effects and the incidence of hormonal contraceptive discontinuation among acceptors in the working area of the Kassi-Kassi Community Health Center, Makassar City.

**Keywords:** contraceptive discontinuation; family planning; hormonal contraception; husband's support; parity; side effects.

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### INTRODUCTION

One of the key indicators of the effectiveness of Family Planning services is the rate of contraceptive discontinuation. An increase in contraceptive discontinuation rates may lead to population growth due to a higher incidence of unintended pregnancies.<sup>1</sup>

Bappenas at the National Working Meeting in February 2012, two major problems were identified in the Family Planning program: the large and continuously growing population, and the unequal access to and suboptimal quality of family planning services. These issues have contributed to a high rate of contraceptive failure and dropout among family planning participants.<sup>2</sup>

Another important indicator of contraceptive service quality is the rate of contraceptive

discontinuation. Discontinuation occurs in both pill and condom users. However, discontinuation due to side effects is more commonly found among users of hormonal contraceptives, whereas reasons such as method failure, drug-related issues, and low motivation are more frequently reported among users of non-hormonal contraceptives.<sup>3</sup>

In the community, hormonal contraceptive methods are widely used. Nearly 70% of family planning acceptors rely on hormonal contraceptives. Nevertheless, many acceptors report side effects related to these methods. As a result, a considerable number of discontinuation cases occur because users do not fully understand how hormonal contraceptive methods work.<sup>4</sup>

Despite ongoing efforts, participation among couples of reproductive age in family planning

programs remains incomplete. One of the primary indicators of contraceptive quality is the rate of discontinuation. Discontinuation, or dropout, refers to the cessation of family planning participation after previous use. The increasing number of contraceptive dropouts contributes to population growth, which subsequently affects welfare levels, education quality, development, and public health, ultimately reducing the overall quality of the population.<sup>5</sup>

In Indonesia, the incidence of contraceptive discontinuation has increased from 11.46% in 2008 to 15.09% in 2012. Although the discontinuation rate later declined to 25%, this figure remains unsatisfactory compared to the ideal target of below 20%. Based on the 2010 Population Census, Indonesia's population reached 237,641,326 people. The annual achievement of new family planning participants was approximately 700,000 acceptors, while the number of discontinuations or dropouts reached 800,000.<sup>6</sup>

Findings on contraceptive discontinuation indicate that 37% of contraceptive use episodes were discontinued within 12 months during the five years preceding the survey. The most common reasons for discontinuation were side effects or health problems (30%) and the desire to become pregnant (27%). Other reasons included fear of side effects, high costs, discomfort associated with contraceptive use, divorce, infrequent sexual intercourse, and contraceptive failure.<sup>5</sup>

Based on data from Family Planning Field Officers in 2019 at the Kassi-Kassi Health Center in Rappocini District, Makassar City, the number of active family planning participants was recorded at 16,660 couples of reproductive age. However, this number had decreased to 10,302 active participants, indicating a decline in family planning participation. The highest rates of contraceptive discontinuation were observed among users of hormonal contraceptive injections and implants.

Previous studies have shown that various factors influence contraceptive discontinuation. Research conducted in Gresik reported that maternal age, parity, education level, contraceptive side effects, and socio-cultural factors were significantly associated with contraceptive discontinuation.<sup>7</sup> Other studies reported similar findings, identifying maternal age, parity, education, side effects, and socio-cultural factors as determinants of contraceptive discontinuation.<sup>8</sup> A study conducted in 2017 found that discontinuation among users of three-

month injectable contraceptives was primarily influenced by the desire to become pregnant, side effects, method switching, and lack of husband's support.<sup>9</sup>

Further analysis suggests a relationship between contraceptive type and age with the return of fertility after contraceptive use. Users of non-hormonal contraceptive methods and individuals under 30 years of age tend to experience a faster return to fertility, often within one year. However, concerns regarding delayed return of fertility remain a common reason for contraceptive discontinuation.<sup>10</sup>

The use of intrauterine devices and tubectomy remained stable during the COVID-19 pandemic, although there was a decrease in the number of service visits.<sup>11</sup> Research conducted in New York demonstrated a correlation between parity and the incidence of family planning discontinuation.<sup>12</sup> In line with these findings, other studies have shown that greater inconsistency in contraceptive use increases the likelihood of discontinuation.<sup>13</sup>

Based on this background, the researcher is interested in conducting a study entitled "Determinants of Hormonal Contraceptive Discontinuation among Acceptors in the Working Area of the Kassi-Kassi Health Center, Makassar City."

## METHODS

This study employed an observational analytical design with a case-control approach using retrospective data. The study population consisted of all hormonal contraceptive users registered at the Kassi-Kassi Community Health Center (Puskesmas) in Makassar City.

The study sample included 80 respondents, comprising 40 respondents in the case group (acceptors who discontinued hormonal contraceptive use) and 40 respondents in the control group (acceptors who continued using hormonal contraceptives). A total sampling technique was applied. Data were collected using a structured questionnaire developed according to the study variables, including husband's support, parity, and side effects. Bivariate data analysis was conducted using the chi-square test with a significance level of  $\alpha = 0.05$ .

**RESULTS****Table 1.** Relationship between Husband's Support and Drop Out Incidents

Husband Support	Drop Out Event				Total		P-value
	Drop out		Don't drop out		N	%	
	N	%	N	%			
Support	33	51.6	31	48.4	64	100	0.781
Does not support	7	43.8	9	56.3	16	100	
Total	40	50	40	50	80	100	

As shown in Table 1, among 80 respondents, 33 respondents (51.6%) who received husband's support discontinued hormonal contraceptive use, while 31 respondents (48.4%) who received husband's support continued use. Among respondents who did not receive husband's support, 7 respondents (43.8%) discontinued use,

whereas 9 respondents (56.3%) continued using hormonal contraceptives.

The chi-square test yielded a p-value of 0.781, which was greater than the significance level ( $\alpha = 0.05$ ), indicating no statistically significant association between husband's support and hormonal contraceptive discontinuation.

**Table 2.** Relationship between Parity and Drop Out Incidents

Parity	Drop Out Event				Total		P-value
	Drop out		Don't drop out		N	%	
	N	%	N	%			
Ideal	19	50.0	19	50.0	38	100	1.000
Not Ideal	21	50.0	21	50.0	42	100	
Total	40	50	40	50	80	100	

Table 2 shows that among respondents with ideal parity, 19 respondents (50.0%) discontinued hormonal contraceptive use and 19 respondents (50.0%) continued use. Similarly, among respondents with non-ideal parity, 21 respondents (50.0%) discontinued use and 21 respondents

(50.0%) continued use. The statistical analysis produced a p-value of 1.000, which exceeded the significance level ( $\alpha = 0.05$ ), indicating no significant association between parity and hormonal contraceptive discontinuation.

**Table 3.** Relationship between Side Effects and Drop Out Incidents

Side effects	Drop Out Event				Total		P-value
	Drop out		Don't drop out		N	%	
	N	%	N	%			
Experience	39	53.4	34	46.6	73	100	0.108
No Experience	1	14.3	6	85.7	7	100	
Total	40	50	40	50	80	100	

As presented in Table 3, among respondents who experienced side effects, 39 respondents (53.4%) discontinued hormonal contraceptive use, while 34 respondents (46.6%) continued use. Among respondents who did not experience side effects, 1 respondent (14.3%) discontinued use, whereas 6 respondents (85.7%) continued hormonal contraceptive use.

The chi-square test resulted in a p-value of 0.108, which was greater than the significance level ( $\alpha = 0.05$ ), indicating no statistically significant association between side effects and hormonal contraceptive discontinuation.

**DISCUSSION**

The results of the bivariate analysis indicated no statistically significant relationship between husband's support and the incidence of hormonal contraceptive discontinuation in the working area of the Kassi-Kassi Health Center, Makassar City ( $p = 0.781$ ). Contraceptive use should be regarded as a shared responsibility between partners, as the selected method must align with the needs and preferences of both the husband and the wife. Mutual support between spouses is essential because family planning and

reproductive health involve both parties. Within the family structure, the husband plays a crucial role as the head of the household.

The findings of this study confirm that husband's support was not significantly associated with hormonal contraceptive discontinuation. As shown in Table 1, a higher proportion of acceptors who received husband's support discontinued hormonal contraceptive use compared to those who received support but continued using the method. The absence of a significant association may be explained by the ability of women to independently make decisions regarding contraceptive use. In many cases, husbands provide support by respecting their wives' choices and covering contraceptive-related costs.

Quality of life, in this context, refers to an individual's assessment of their ability to experience and enjoy meaningful life events, which contributes to overall well-being. Limited husband involvement may also reflect the husband's decision to fully entrust contraceptive choices to the wife as a form of support, particularly in matters related to pregnancy regulation and family care. These findings are consistent with previous research<sup>14</sup>, which reported no significant relationship between husband's support and quality of life among Intrauterine Device (IUD) contraceptive acceptors.

The lack or minimal level of husband's support may be influenced by several factors, including limited knowledge, lower educational background, minimal male participation in family planning programs, reluctance to accompany wives to service facilities, and limited financial support. Knowledge is one of the key factors influencing husband's support, as greater knowledge about contraception is associated with stronger support for contraceptive use (14). However, these findings contrast with a previous study conducted in 2021, which reported that husband's support was the most influential factor in the selection of short-term injectable contraceptive methods.

The analysis also showed no significant relationship between parity and the incidence of hormonal contraceptive discontinuation in the working area of the Kassi-Kassi Health Center, Makassar City. This finding is consistent with previous research<sup>15</sup> which found that women of reproductive age with lower parity were more likely to discontinue contraceptive use. Earlier studies indicated that women with low parity often

discontinued contraception due to experienced side effects or the desire to have additional children. Among couples of reproductive age with children under two years old, the ideal number of children is generally considered to be two to four. Women with low parity tended to discontinue contraception because they desired more children, whereas women with higher parity discontinued use because they felt they were older and no longer wished to have additional children. Nevertheless, the results of this study showed no significant relationship between parity and hormonal contraceptive discontinuation<sup>15</sup>.

These findings are in line with a study conducted in Bangladesh<sup>16</sup>, which reported no association between parity or number of children and the rate of contraceptive discontinuation among family planning acceptors. Similarly, other studies<sup>17</sup> found no significant relationship between parity and IUD discontinuation, indicating that the number of children does not influence the likelihood of IUD discontinuation. In contrast, other research<sup>18</sup> identified a significant relationship between parity and contraceptive discontinuation, showing higher discontinuation rates among couples of reproductive age with more than three children. Additionally, another study<sup>19</sup> reported a significant association between parity and IUD discontinuation, noting that IUD acceptors with fewer than two children had a 1.874 times higher risk of discontinuation compared to those with two or more children.

Furthermore, the analysis demonstrated no significant relationship between side effects and the incidence of hormonal contraceptive discontinuation in the working area of the Kassi-Kassi Health Center, Makassar City. Side effects are defined as complaints or conditions experienced by family planning acceptors as a result of using a particular contraceptive method. Side effects commonly occur because no contraceptive method is 100% perfect; therefore, family planning users must consider three important aspects: effectiveness, safety, and side effects. When side effects can be managed, acceptors are more likely to continue using contraception.

The role of midwives in addressing contraceptive side effects is crucial and includes improving midwifery services by providing adequate counseling before and during contraceptive use, thereby preventing discontinuation. As shown in Table 3, acceptors who experienced side effects were more likely to discontinue contraceptive use, whereas those who did not experience side

effects tended to continue use. However, statistical analysis indicated that this association was not significant. This suggests that side effects were not the primary reason for discontinuation among respondents.

This finding may be explained by the perception among many respondents that contraceptive side effects are normal and tolerable. Although most respondents experienced side effects, these were not perceived as significantly interfering with daily activities, which may explain the absence of a significant association between side effects and hormonal contraceptive discontinuation. The results of this study are consistent with previous research<sup>20</sup>, which reported no significant relationship between side effects and family planning dropout. Similar findings were also reported in other studies<sup>21</sup>, which found no association between contraceptive side effects and family planning discontinuation.

## CONCLUSION

Based on the results of this study, it can be concluded that there is no statistically significant relationship between husband's support and the incidence of hormonal contraceptive discontinuation. In addition, no significant relationship was found between parity and hormonal contraceptive discontinuation, nor between side effects and the incidence of hormonal contraceptive discontinuation among acceptors.

These findings indicate that discontinuation of hormonal contraceptive use is not solely influenced by husband's support, number of children, or perceived side effects, but is likely affected by other factors that were not examined in this study.

It is expected that health workers, particularly midwives and family planning officers, will continuously improve the quality of contraceptive counseling services, especially regarding the mechanisms of action of hormonal contraceptives, potential side effects, and their management. Improved counseling may enhance acceptors' understanding and reduce the likelihood of premature discontinuation of contraceptive use. Future researchers are encouraged to examine other factors that may influence hormonal contraception

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